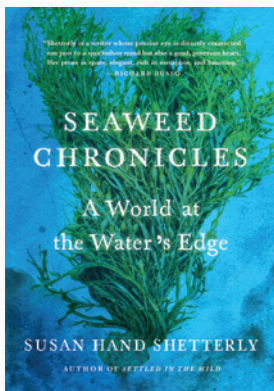


REVIEWS



Seaweed Chronicles

SUSAN HAND SHETTERLY

Algonquin Books, 2018. \$24.95, 288 pages.

ALONG THE COAST of Maine, a “tightly woven warp and woof of life, an ancient and essential system of give-and-take” flourishes around forests of seaweed. It is a “world at the margins,” Susan Hand Shetterly writes, that includes kelp-grazing island sheep, migratory alewives, dwindling common eider ducks, and people dedicated to harvesting, studying, and protecting seaweed.

For generations, coastal communities gleaned life and livelihood from what

seemed an infinite ocean, now depleted. Kelp, in growing demand as a healthy food, has supported jobs in these communities while providing habitat for a complex ocean food web. But seaweed forests are falling to a similar pressure that has axed fisheries: industrial overharvesting that disrupts balances in ocean ecosystems. *Seaweed Chronicles* explores these tensions between science, policy, and practice experienced by people resolved to use and preserve this valuable and vulnerable resource.

Although they resemble grass or trees, seaweeds are algae anchored to ocean bottom with their stalks buoyed to the surface in tangled mats. Around the world, people eat seaweed as vegetables, and it hides in many products, from toothpaste to makeup to dog food. “Most of us cannot get through a day without meeting seaweed in a disguised and processed form,” Shetterly writes.

In her book, she depicts seaweed, wildlife, people, and the setting as separate characters in relationship with one another. The Gulf of Maine’s underwater topography and scattered islands spin currents from below, lifting nutrients and oxygen to dense seaweed forests. These kelp forests sustain cascades of life, from isopods and periwinkles to gulls and cod. Shetterly folds human stories into the

wild ones, lifting each new strand to join the others as in a French braid, pulled tight and practical like the community of weathered Mainers itself. Her respect and affection for this community is contagious as she invites us into her conversations with biologists, policy makers, and seaweed harvesters, whether by the fireside or in farmer Sarah Redmond’s boat as she checks her thirty-acre plots of seaweed.

Meanwhile, growing industrial harvests, by companies using tools both effective and destructive, threaten rockweed forests along Maine’s coast and the species that need them for survival. Biologists are studying cutting techniques and are researching how cut areas can return to full ecological function, but much remains uncertain—especially the human ability to moderate harvest, a familiar challenge. Maine is “new to the pressures of this accelerating seaweed harvest. . . . But we know a lot about plunder. We’ve been doing it ourselves for years.”

As oceans are plundered, some coastal citizens are acting to protect rockweed’s wild habitat and curb industrial harvest. The Rockweed Coalition is one group, among others such as the Nature Conservancy and the Seaweed Council, questioning seaweed harvest and the

policy guiding it in Maine. These groups debate who owns the rockweed—coastal landowners or the public—how to reap its abundance sustainably, and where not to cut it at all. For a community defined by the coast, the ocean's faded abundance wounds their identity and their hopes.

"And yet," Shetterly writes,

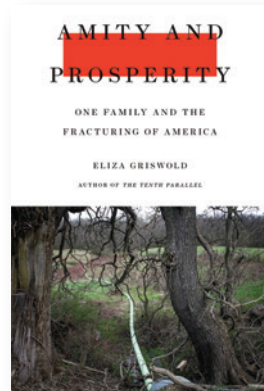
so many of us work to understand where we live, to use what's left of wild water and shore carefully and well. Perhaps that makes us unrealistic dreamers. Perhaps it makes us steely-eyed realists. Certainly it makes us fighters.

These fighters see sustainable seaweed harvest as a path to both economic stability and vibrant rockweed forests. Following the lead of pioneers like Linnette and Shep Erhart, who started the seaweed supply business Maine Coast Sea Vegetables in the 1970s, another generation is carefully bringing seaweed from the forest to the table. Edible seaweed harvester Andrea DeFrancesco starts the season in icy cold March and calibrates her cutting to foster healthy regrowth. Another harvester, Micah Woodcock, teaches a local cooking class to make sugar kelp noodles with garlic, butter, and mussels, and an *Alaria* (a type of alga) salad with blueberries. Shetterly finds hope in these people: "They understand that you can't protect a wild ecosystem if the people living beside it feel diminished."

Shetterly's spare, lyrical prose depicts the essence and detail of people, wildlife, seaweed, and sea so that they stay with me long after I close the book. I now think of underwater forests while eating a seaweed salad with sushi. I lift luminous green strands to eye level, questioning their identity and method of harvest. What small creatures lived among these tangles? The salty sesame

pile feels resilient between my teeth, but its story is tethered to the sea, our growing appetites, and how we decide "what's worth saving."

—Abbie Gascho Landis



Amity and Prosperity

ELIZA GRISWOLD

Farrar, Straus and Giroux, 2018.
\$27, 336 pages.

IN 2007, while crossing a Nigerian river atop a steel drum because a nearby bridge had collapsed, Eliza Griswold recalled the Interstate 35W bridge collapse in Minneapolis that killed 13 people and injured another 145. If failing infrastructure is a mark of a country struggling with poverty, she thought, maybe it was time for her to return home and examine the United States.

The result is *Amity and Prosperity*, an engrossing examination of the fracking boom in rural southwestern Pennsylvania. The book follows a handful of families in their collective fight against the oil and gas exploration company Range Resources, which they accuse of poisoning their water and air, but the story's beating heart is plaintiff Stacey Haney. A single mother of two hoping to remain on her family's financially troubled farm,

Stacey leases eight acres to Range as a way to fuel that hope. But the family and its animals are soon plagued by unexplained illnesses. Her son Harley is in and out of the hospital, suffering canker sores, intestinal distress, weight loss, arsenic poisoning, and more, forcing the family to finally move off the land and into a camper, abandoning the farmhouse to metal scavengers.

Griswold spent seven years researching and reporting for this book, and the tale touches on many of America's current ills beyond fracking: massive wealth disparity, the opioid crisis, fierce ideological differences along political lines, and our racial strife (a distant relative of Stacey's is an imprisoned Ku Klux Klan member). By the book's end, Harley's childhood dream of becoming a veterinarian is long dead, and he's instead installing residential gas pipelines. Though only in his early twenties, he's as defeated and embittered as someone three times his age. Stacey encourages him to try to put his past illness and Range Resources behind him, but he can't. "I'll never move on," he tells her, "they've ruined my life."

The book can, at times, function as a sort of white paper on fracking. Griswold writes that Range's subcontractors "pumped a total of 3,343,986 gallons of water and chemicals into the perforated pipe"; those chemicals included "ethylene glycol, a neurotoxin, and elements of BTEX, the shorthand for benzene, toluene, ethylbenzene, and xylene." That cocktail, along with "4,014,720 pounds of clay pellets," is blasted "downhole to crack the shale."

This is all information necessary to fully explain the hazards of fracking and why it has revolutionized fossil fuel extraction. It's not lost on Griswold that Stacey Haney and others in her community willingly leased their land for the money they hoped it would bring, but that's the